

### REMARKS

This is a full and timely response to the outstanding final Office Action mailed November 2, 2005 (Paper No. 20051027). Upon entry of this response, claims 1-46 are pending in the application. In this response, claim 29 has been amended.

Applicant respectfully requests that the amendments being filed herewith be entered. The amendment to claim 29 corrects typographical errors introduced in the last response.

Specifically, the phrase “a bandwidth allocation schedule by dynamically assigning” has been changed to the grammatically correct “a bandwidth allocation scheduler that dynamically assigns.” This amendment was not made earlier because the errors have only recently come to Applicant’s attention. Applicant respectfully requests that there be reconsideration of all pending claims.

#### 1. Official Notice

The outstanding Office Action alleges that:

Applicant’s failure to properly traverse the Official Notice taken as admission of prior art. In particular applicant must specifically point out the supposed errors in the Examiner's action, which would include stating why the noticed fact is not considered to be common knowledge or well known in the art. See 37 CFR 1.111(b). Applicant simply makes a broad statement without referring to specific claims or the specific features of which Official Notice was taken.  
(Office Action, p. 2.)

The MPEP explains the procedure for traversing an allegation of Official Notice:

To adequately traverse such a finding, an applicant must specifically point out the supposed errors in the examiner’s action, which would include stating why the noticed fact is not considered to be commonly known or well known in the art. See 37 C.F.R. 1.111(b). See also *Chevenard*, 139 F.2d at 713, 60 USPQ at 241. (“[I]n the absence of any demand by applicant for the examiner to produce authority for his statement, we will not consider this

contention.”) A general allegation that the claims define a patentable invention without any reference to the examiner’s assertion of Official notice would be inadequate.  
MPEP 2144.03(C)

Applicant respectfully submits that the traversal of Official Notice contained in the last response (and reproduced below) meets the requirements of MPEP 2144.03(C):

Furthermore, any and all findings of well-known art and official notice, or statements interpreted similarly, should not be considered well known since the Office Action does not include specific factual findings predicated on sound technical and scientific reasoning to support such conclusions.  
(p. 17 of Response filed July 25, 2005)

Specifically, Applicant points out that

- a) the traversal was not a “general allegation that the claims define a patentable invention”;
- b) the traversal did reference the assertion of Official notice; and
- c) the traversal did state why the noticed fact is not considered to be commonly known or well known in the art (“should not be considered well known since the Office Action does not include specific factual findings predicated on sound technical and scientific reasoning to support such conclusions”).

Applicant notes that the reasons given in the outstanding Office Action for why the traversal was inadequate – “Applicant simply makes a broad statement without referring to specific claims or the specific features of which Official Notice was taken” – are not found in the MPEP. For at least these reasons, Applicant has *not* made any admissions of prior art, as alleged in the outstanding Office Action.

In addition, Applicant further contends that the subject matter of each particular finding of Official Notice should not be considered to be well-known for the specific reasons that the statements are too complex and detailed to be considered well-known. Specifically, Applicant traverses the finding of Official Notice in connection with claims 3-4, 10, 13-14, 22-23, and 30 that “transmitting a price in response to a user request is well known in the art.” Applicant

traverses the finding of Official Notice in connection with claims 6, 16, 28, and 43 that “random access options, such as trick play modes, used in conjunction with VOD are well known in the art.” Applicant traverses the finding of Official Notice in connection with claims 7, 17, 26, and 44 that “charging different prices to customers based on customer priority is notoriously well known in the art.” Applicant traverses the finding of Official Notice in connection with claim 32 that “displaying an indicator for utilizing a viewing option is well known in the art.” Applicant traverses the finding of Official Notice in connection with claims 33 and 34 that “displaying an elapsed time, for example an indicator, which notes that the program started 5 minutes ago, and an indicator displayed intermittently, such as a trick play indicator, is well known in the art.” Applicant traverses the finding of Official Notice in connection with claims 35, 37, 39, and 40 that “isplaying a trick play indicator is well known in the art.” Finally, Applicant traverses the finding of Official Notice in connection with claim 38 that “the use of a user selectable icon within an electronic program guide to bring up a menu of options is notoriously well known in the art.”

2. Rejection of Claims 1-7, 9-17, and 19 under 35 U.S.C. §103

Claims 1-7, 9-17, and 19 have been rejected under §103(a) as allegedly obvious over *Shah-Nazaroff* (6,157,377) in view of *Gell* (5,802,502) and *Blahut* (5,532,735). Applicant respectfully traverses this rejection. It is well established at law that, for a proper rejection of a claim under 35 U.S.C. §103 as being obvious based upon a combination of references, the cited combination of references must disclose, teach, or suggest, either implicitly, all elements/features/steps of the claim at issue. *See, e.g., In re Dow Chemical*, 5 U.S.P.Q.2d 1529, 1531 (Fed. Cir. 1988); *In re Keller*, 208 U.S.P.Q.2d 871, 881 (C.C.P.A. 1981).

A. Claims 1 and 11

i. The proposed combination does not disclose, teach, or suggest “receiving bandwidth allocation information from a bandwidth allocation manager”

The Office Action (p. 3) alleges that “*Shah-Nazaroff* discloses in figure 5, a number of viewing options with prices for PPV and VOD listings, such as audio and video quality upgrades and the ability to record, prices are higher for better quality video as more bandwidth is consumed (column 2, lines 17-52, 63-67, column 3, lines 1-16, 65-67, Figure 4).” Even assuming this characterization of the reference is true, a mere statement that bandwidth varies with video quality does not disclose, teach, or suggest the feature of “receiving bandwidth allocation information” as recited in claims 1 and 11.

Next, the Office Action (p. 3) alleges that *Gell* discloses “prices are generated dynamically, by receiving pricing from a number of different program providers (column 12, lines 49-60, column 13, lines 3-11, lowest price is selected based on QOS and quality selections, bandwidth allocation is the QOS settings.” Even assuming that QOS settings provided with a price signal correspond to “bandwidth information,” this information is not received from a “bandwidth allocation manager” as recited in claims 1 and 11.

Finally, the Office Action (p. 4) alleges that *Blahut* discloses “a system in which two different VOD services are provided to users 222 from a headend 202 over a common medium and are thus divided between an amount of available bandwidth (figures 3 and 4).” Even assuming this characterization of the reference is true, a teaching of the existence of a system that divides bandwidth between services does not disclose, teach, or suggest the feature of “receiving bandwidth allocation information” as recited in claims 1 and 11. These references, taken individually or in combination, do not disclose, teach, or suggest the above-described feature.

ii. The proposed combination does not disclose, teach, or suggest “dynamically assigning a price criterion to each of a group of viewing options for a video program, each viewing option associated with a content delivery mode, the assignment based at least in part on the bandwidth allocation information”

*Shah-Nazaroff* discloses a system in which price is based on the features selected by a user: “a viewer at client system 110 who has ordered a pay-per-view movie can pay an additional fee to receive the movie at a higher video resolution and/or in digital Dolby surround sound rather than monotone audio” (Col. 2, lines 20-25); “for each incremental level of resolution, more bandwidth is needed for the broadcast, so the price of each incremental level of resolution may be higher” (Col. 2, lines 49-52); “a viewer may buy an upgraded media feature to receive a recordable version of the broadcast” (Col. 2, lines 65-67).

*Gell* describes price determination as follows: “At present, different telecommunications suppliers provide services at different prices, which may be calculated on different bases. Many service suppliers charge on the basis of time used, but different rates may be used in different time bands, and over different distance bands (e.g. local, long distance or international). The time and distance bands employed by different suppliers may differ, and additionally, different suppliers may offer features such as discounts for bulk usage, subscriptions, or lower prices at times of low network usage.” (Col. 1, lines 24-33.)

*Blahut* discloses an interactive TV system that “allows for adjusting an amount of a bill of a subscriber to interactive television services based upon the amount of advertisements viewed in a show” and “adjusting an amount of a bill of a subscriber to interactive television services based upon the level of advertisements sent to the interactive services subscriber location on a regular basis.” (Col. 2, lines 20-30.)

Claims 1 and 11 include the feature of assigning a price criteria “based at least in part on the bandwidth allocation information.” The phrase “bandwidth allocation information” is further

described in claims 1 and 11 as “related to an amount of bandwidth divided between at least a first service and a second service provided by the digital broadband delivery system to a plurality of digital home communication terminals.” These references, taken individually or in combination, do not disclose, teach, or suggest this feature. Even assuming these references teach that the price for one service among many depends on bandwidth used by the service, there is no teaching that information about how bandwidth is allocated between services is provided by the terminals and used to assign prices.

iii. Conclusion

Since the proposed combination does not teach at least the above-described features recited in claims 1 and 11, a *prima facie* case establishing an obviousness rejection has not been made. Thus, claims 1 and 11 are not obvious under the proposed combination of *Shah-Nazaroff* in view of *Gell* and *Blahut*, and the rejection should be withdrawn.

B. Claims 2-7, 9-10, 12-17, and 19

Since claims 1-7, 9-17, and 19 are allowable, Applicant respectfully submits that claims 2-7, 9-10, 12-17, and 19 are allowable for at least the reason that each depends from an allowable claim. *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q. 2d 1596, 1598 (Fed. Cir. 1988). Therefore, Applicant respectfully requests that the rejection of claims 2-7, 9-10, 12-17, and 19 be withdrawn.

3. Rejection of Claims 20-26 and 28-44 under 35 U.S.C. §103

Claims 20-26 and 28-44 have been rejected under §103(a) as allegedly obvious over *Shah-Nazaroff* (6,157,377) in view of *Gell* (5,802,502) and *Blahut* (5,532,735) and *Son* (6,697,376). Applicant respectfully traverses this rejection. It is well established at law that, for a proper rejection of a claim under 35 U.S.C. §103 as being obvious based upon a combination of

references, the cited combination of references must disclose, teach, or suggest, either implicitly, all elements/features/steps of the claim at issue. *See, e.g., In re Dow Chemical*, 5 U.S.P.Q.2d 1529, 1531 (Fed. Cir. 1988); *In re Keller*, 208 U.S.P.Q.2d 871, 881 (C.C.P.A. 1981).

A. Claims 20 and 29

i. The proposed combination does not disclose, teach, or suggest “a bandwidth allocation manager” or “a bandwidth allocation scheduler”

The Office Action (pages 7-8) alleges that the “bandwidth allocation manager” recited in claims 20 and 29 corresponds to the server system with broadcast source IO module 30, billing I/O client 840 and client I/O 820, disclosed in Col. 10, lines 1-36 of *Shah-Nazaroff*. The Office Action (pages 7-8) further alleges that the claimed feature “dynamically assigning one of a plurality of content delivery modes to each of a plurality of digital transmission channels” corresponds to the teaching in *Shah-Nazaroff* that a “user orders a VOD program from a satellite provider, and is assigned to a channel with fewer simultaneous transmissions in order to receive a higher quality picture/resolution.”

Next, the Office Action (p. 3) alleges that the claimed feature “dynamically assigning one of a plurality of content delivery modes to each of a plurality of digital transmission channels for each of a plurality of time periods” corresponds to the teaching in *Blahut* that “two different VOD services are provided to users 222 from a headend 202 over a common medium over a number of virtual channels for a number of period...further a schedule is provided.”

Even assuming that these characterizations of the references are true, combining one teaching that a head-end has a program schedule with another teaching that a head-end transmits on different channels to different users on the same medium does not result in the feature “a bandwidth allocation manager that **determines a bandwidth allocation schedule**” as recited in claim 20 or a “a bandwidth allocation scheduler that dynamically assigns one of a plurality of

content delivery modes to each of a group of digital transmission channels for each of a plurality of time periods” as recited in claim 29. Nor do the teachings of *Gell* and *Son* remedy this deficiency.

ii. The proposed combination does not disclose, teach, or suggest “a pricing system that...dynamically assigns a price criterion to each of a group of viewing options based at least in part on the bandwidth allocation information received from the bandwidth allocation manager”

*Shah-Nazaroff* discloses a system in which price is based on the features selected by a user: “a viewer at client system 110 who has ordered a pay-per-view movie can pay an additional fee to receive the movie at a higher video resolution and/or in digital Dolby surround sound rather than monotone audio” (Col. 2, lines 20-25); “for each incremental level of resolution, more bandwidth is needed for the broadcast, so the price of each incremental level of resolution may be higher” (Col. 2, lines 49-52); “a viewer may buy an upgraded media feature to receive a recordable version of the broadcast” (Col. 2, lines 65-67).

*Gell* describes price determination as follows: “At present, different telecommunications suppliers provide services at different prices, which may be calculated on different bases. Many service suppliers charge on the basis of time used, but different rates may be used in different time bands, and over different distance bands (e.g. local, long distance or international). The time and distance bands employed by different suppliers may differ, and additionally, different suppliers may offer features such as discounts for bulk usage, subscriptions, or lower prices at times of low network usage.” (Col. 1, lines 24-33.)

*Blahut* discloses an interactive TV system that “allows for adjusting an amount of a bill of a subscriber to interactive television services based upon the amount of advertisements viewed in a show” and “adjusting an amount of a bill of a subscriber to interactive television services



based upon the level of advertisements sent to the interactive services subscriber location on a regular basis.” (Col. 2, lines 20-30.)

Claims 1 and 11 include the feature of assigning a price criteria “based at least in part on the bandwidth allocation information received from the bandwidth allocation manager.” These references, taken individually or in combination, do not disclose, teach, or suggest this feature. Even assuming these references teach that the price for one service among many depends on bandwidth used by the service, there is no teaching that information about how bandwidth is allocated between services is provided by the terminals and used to assign prices.

iii. Conclusion

Since the proposed combination does not teach at least the above-described features recited in claims 20 and 29, a *prima facie* case establishing an obviousness rejection has not been made. Thus, claims 20 and 29 are not obvious under the proposed combination of *Shah-Nazaroff* in view of *Gell* and *Blahut*, and the rejection should be withdrawn.

B. Claims 21-26, 28, and 30-44

Since claims 20-26 and 28-44 are allowable, Applicant respectfully submits that claims 21-26, 28, and 30-44 are allowable for at least the reason that each depends from an allowable claim. *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q. 2d 1596, 1598 (Fed. Cir. 1988). Therefore, Applicant respectfully request that the rejection of claims 21-26, 28, and 30-44 be withdrawn.

4. Rejection of Claims 8 and 18 under 35 U.S.C. §103

Claims 8 and 18 have been rejected under §103(a) as allegedly obvious over *Shah-Nazaroff* (6,157,377) in view of *Gell* (5,802,502), *Blahut* (5,532,735), and *Candelore* (6,057,872). Applicant respectfully traverses this rejection. Since claims 1 and 11 are allowable, Applicant respectfully submits that claims 8 and 18 are allowable for at least the reason that each

depends from an allowable claim. *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q. 2d 1596, 1598 (Fed. Cir. 1988). Therefore, Applicant respectfully request that the rejection of claims 8 and 18 be withdrawn.

5. Rejection of Claim 7 under 35 U.S.C. §103

Claim 7 has been rejected under §103(a) as allegedly obvious over *Shah-Nazaroff* (6,157,377) in view of *Gell* (5,802,502), *Blahut* (5,532,735), *Son* (6,697,376), and *Candelore* (6,057,872). Applicant respectfully traverses this rejection. Since claim 1 is allowable, Applicant respectfully submits that claim 7 is allowable for at least the reason that it depends from an allowable claim. *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q. 2d 1596, 1598 (Fed. Cir. 1988). Therefore, Applicant respectfully request that the rejection of claim 7 be withdrawn.

6. Rejection of Claims 45-46 under 35 U.S.C. §103

Claims 45-46 have been rejected under §103(a) as allegedly obvious over *Shah-Nazaroff* (6,157,377) in view of *Gell* (5,802,502), *Blahut* (5,532,735), *Son* (6,697,376), and *Arsenault* (6,701,528). Applicant respectfully traverses this rejection. Since claim 29 is allowable, Applicant respectfully submits that claims 45-46 are allowable for at least the reason that each depends from an allowable claim. *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q. 2d 1596, 1598 (Fed. Cir. 1988). Therefore, Applicant respectfully request that the rejection of claims 45-46 be withdrawn.

**CONCLUSION**

Applicant respectfully requests that all outstanding objections and rejections be withdrawn and that this application and presently pending claims 1-46 be allowed to issue. Any statements in the Office Action that are not explicitly addressed herein are not intended to be admitted. In addition, any and all findings of inherency are traversed as not having been shown to be necessarily present. Furthermore, any and all findings of well-known art and official notice, or statements interpreted similarly, should not be considered well known since the Office Action does not include specific factual findings predicated on sound technical and scientific reasoning to support such conclusions. If the Examiner has any questions or comments regarding Applicant's response, the Examiner is encouraged to telephone Applicant's undersigned counsel.

Respectfully submitted,

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